Amendments to the Claims

This listing of the claims will replace all prior versions and listings of the claims in the application.

Listing of Claims:

- 1. (Currently amended) MA measuring device on at least one rail of a railway track for measuring the roundness of an individual railway vehicle wheel or the railway vehicle wheels of a set of wheels during running thereof on the rail as a difference of the a circumferential radius of the a wheel flange eaptop and the a radius of the a running surface tread of the railway vehicle wheel in a measuring plane, characterised in thatin which the measuring device, within a measuring path (25) along the rail (4), consists of comprises:
- a plurality of individual measuring sensors-(12), which respectively are (i) configured as a feeler roller, (ii) have a lateral distance-(33) from one another-and, and (iii) are connected to the rail-(4) in the measuring plane-(17) along the axis of rotation-(6) of the railway vehicle wheel or the set of wheels and perpendicularly to the contact surface-(10) of the respective railway vehicle wheel-(1)_x, in a manner that during a predetermined measuring time at least two adjacent measuring sensors contact the circumference of the wheel flange top at the same time.
- (Currently amended) <u>MThe measuring device according toof</u> claim 1, characterised in thatwherein the measuring path (25)-is between one and two times the circumference of the running treadsurface (2) of the railway vehicle wheel (1).
- (Currently amended) M<u>The m</u>easuring device according to claims 1 and 2of claim 1, characterised in that, wherein within the measuring path (25), at least one measuring sensor (12) contacts the circumference of the wheel flange topeap (5).
 - 4. (Cancelled)

- (Currently amended) <u>MThe measuring device according to any one of claims 1 to 4of claim 1</u>, characterised in that, wherein each measuring sensor (12) consists of the following elements further comprises:
 - a base (16)-that may be fastened to the rail-(4);
 - a measuring lever (13) comprising;
 - a feeler roller (14) at the outer end[[,]] of the measuring lever;
 - a swivel joint (18) on the base (16) for the measuring lever (12);
 - a return spring (19)-between the feeler roller (12) and the swivel joint (18); and and an angle sensor (20) in or on the swivel joint (18).
- (Currently amended) <u>MThe measuring device according toof</u> claim 5, characterised in that, further comprising a calibration stop is provided.
- (Currently amended) <u>MThe measuring device according to any one of claims 1 to 6, of claim 1, characterised in that, further comprising an evaluation device[[,]] to which each individual measuring sensor (12) may becan be connected, is provided.
 </u>
- (Currently amended) <u>MThe measuring device according toof</u> claim 7, characterised in that, wherein the evaluation device comprises subordinate means for determining:

the roundness (7) of the railway vehicle wheel (1) with precise values in the measuring points (23) of the sensors (12) and with tangents in the measuring points.

the wheel diameter in the running tread-of the running surface (2),

the height of the wheel flange (5)-in the contact surface (10)-of the running <u>treadsurface</u> (2) and

the number, the position and respective depth of $\underline{\text{flat spots}}_{\text{wheel flats}}$ (11) in the running $\underline{\text{surface}}_{(2)}$.

Amendment and Response Serial No. 10/540,343 Page 6 of 12

- 9. (Currently amended) <u>MThe measuring device according toof</u> claim 8, characterised in that, wherein the evaluation device comprises a subordinate means for determining the transverse displacement (29) of the railway vehicle wheel (1) or the railway vehicle wheels (1) of a set of wheels on passing through (3) the measuring path (25).
- 10. (Currently amended) <u>MThe measuring device according toof</u> claim 8, characterised in that, wherein the evaluation device comprises a subordinate means that recursively corrects the diameter of the railway vehicle wheel-(+) or the railway vehicle wheels-(+) of a set of wheels with a measured deviation-(7) from the roundness of the respective railway vehicle wheel-(+).
- (Currently amended) <u>MThe measuring device according toof</u> claim 5, eharacterised in that, wherein a dirt scraper is provided on the feeler roller (14).
- 12. (New) The measuring device of claim 2, wherein within the measuring path, at least one measuring sensor contacts the circumference of the wheel flange top.
- 13. (New) The measuring device of claim 2, wherein each measuring sensor further comprises:
 - a base that may be fastened to the rail;
 - a measuring lever;
 - a feeler roller at the outer end of the measuring lever;
 - a swivel joint on the base for the measuring lever;
 - a return spring between the feeler roller and the swivel join; and
 - an angle sensor in or on the swivel joint.

Amendment and Response Serial No. 10/540,343 Page 7 of 12

- 14. (New) The measuring device of claim 3, wherein each measuring sensor further comprises:
 - a base that may be fastened to the rail;
 - a measuring lever:
 - a feeler roller at the outer end of the measuring lever;
 - a swivel joint on the base for the measuring lever;
 - a return spring between the feeler roller and the swivel join; and
 - an angle sensor in or on the swivel joint.
- 15. (New) The measuring device of claim 2, further comprising an evaluation device to which each individual measuring sensor can be connected.
- 16. (New) The measuring device of claim 3, further comprising an evaluation device to which each individual measuring sensor can be connected.
- 17. (New) The measuring device of claim 5, further comprising an evaluation device to which each individual measuring sensor can be connected.
- 18. (New) The measuring device of claim 6, further comprising an evaluation device to which each individual measuring sensor can be connected.